



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Juergen-Michael Weick Art Unit : 1725
Serial No. : 10/632,096 Examiner : Heinrich, Samuel M.
Filed : August 1, 2003
Title : LASER PROCESSING MACHINE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO ACTION OF APRIL 11, 2005

In reply to the Office Action of April 11, 2005, Applicant submits the following remarks.

Claims 1-17 are pending in the application, with claim 1 being independent. Claims 16 and 17 have been withdrawn.

35 U.S.C. § 102

Claims 1, 2, and 11 have been rejected as allegedly anticipated by U.S. Patent No. 4,723,075 ("Michaelis"). Applicants request withdrawal of this rejection, because Michaelis does not disclose the subject matter recited in independent claim 1.

Independent claim 1 recites a laser-processing machine including a measuring cell into which gas to be analyzed can flow, a means for decoupling diagnostic radiation from radiation provided for material processing of a workpiece, and a sound detector for detecting a photo-acoustical effect due to absorption of the diagnostic radiation by gas in the cell.

Michaelis relates to a method and apparatus for the detection of hydrocarbons dissolved in bodies of water (col. 1:11-14). As shown in FIG. 1 and described in the Michaelis specification at col. 4:40-67, a diagnostic laser beam 26 is directed from a laser 16 into a measuring chamber 14. The measuring chamber 14 includes a microphone 19 that detects an acoustic signal generated by an interaction of the laser beam and the gas in the measuring chamber. Michaelis also discloses that a beam splitter 18 located between the laser 16 and the measuring chamber 14 can split off a portion of the diagnostic beam 26 away from the measuring chamber 14 and toward a detector 17' that is used for normalizing the system.

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